REMARKS

Claims 1, 3-35, 37-38, 40-41 and 53-63 are pending in the application upon entry of the amendments and new claims. Claims 1, 3, 11, 13, 20, 28, 33, 37, 41, and 59 have been amended to better describe certain aspects of the invention. Claims 2, 36, and 39 have been cancelled. Favorable reconsideration in light of the amendments and the remarks which follow is respectfully requested.

The Amendments and New Claims

The independent claims 1, 11, 13, 20, 33, 41, and 59 have been amended to better describe the subject matter of the invention by reciting the element of two signal detectors that separately detect a first wavelength or a second wavelength. Support for the amendments exists in the specification, for example, page 5, penultimate paragraph through bridging paragraph pages 5-6. Independent claim 37 has been amended to better describe the subject matter of the invention by reciting a light source communicating with a second end of a second waveguide. Support for the amendment exists in the specification, for example, page 8, third paragraph, and Figure 7. New claims 64-66 are fully supported by the specification, for example, page 3, second full paragraph.

The First Anticipation Rejection

Claims 1-8, 10-14, 16-17, 19-21, 33-40, 53-60, and 63 (including all of the independent claims) are rejected under 35 U.S.C. § 102(b) over Yamashita et al. (U.S.

Patent Publication 2001/0053266). To establish anticipation, each and every claim feature must be disclosed in a single cited art document.

Independent claims 1, 11, 13, 20, 33, 37, 41, and 59 all recite the bands of signals centered at the first and second wavelengths comprised in the single input signal source. That is, an input source comprised of two distinct wavelengths is required. The function of the device of Yamashita et al. is "calculation of the intensity and wavelength of the light emitted from a light source" (para. [0013]) where the light source is a laser diode (para. [0037]). It is well known in the art that laser diodes emit light in a narrow band centered on ONE wavelength. Therefore, Yamashita et al. does not teach an input with two wavelengths.

Further, the function of the device of Yamashita et al. is to monitor slight wavelength and power fluctuations from a laser diode source due to changes in threshold voltages over time. (para. [0007]). The device of Yamashita et al. CANNOT AND DOES NOT function as a demultiplexer of incoming communication signals, but only to monitor the stability of laser photodiodes generating signals. Specifically, the device of Yamashita et al. is arranged such that all wavelengths present in the input source reach the photodetector PD2 in all embodiments shown. (*See* para. [0038], light reaches PD2 without passage though any wavelength selection device). Further, comparison of the total spectrum output of a light source (detected at PD2) to the output of the same light source passed through a wavelength selective filter (detected at PD2) is the manner is which the device functions to detected minute fluctuations of the laser source. (para. [0044]). Therefore, the device of Yamashita et al. performs a separate function unrelated to the devices disclosed in the application (demultiplexing) nor can the device of Yamashita et al. perform a demultiplexing function.

Further, claims 1, 11, 13, 20, 33, 41 and 59, as amended, recite a first and second signal detector positioned to detect a first and second wavelength, respectively, or a first and second signal detector placed at a first and second output end, respectively (where the first and second wavelengths are directed to the respective

output ends). As discussed, Yamashita et al. appears to disclose a device having two detectors; however, both detectors are monitoring output from the same laser photodiode source and are therefore detecting a signal centered on the same wavelength. Therefore, Yamashita et al. fails to disclose two detectors monitoring two separate wavelengths. Claim 37, as amended, recites a second waveguide having a first end communicating with a wavelength selective filter and a second end communicating with a light signal source. Yamashita et al. appears to disclose a light signal source (Fig. 2); however, the light signal source is communicating with one end of a waveguide (110) having another end connected to a coupler (120). The majority of the light passing through the coupler is directed away from the device disclosed in Yamashita et al. (para. [0037]) while the residual light is not immediately directed to a wavelength selective filter. Therefore, the light signal source of Yamashita et al. does not meet the recited limitations of claim 37.

All of the rejected dependent claims are not anticipated for at least the same reasons the independent claims are not anticipated. Therefore, it is respectfully requested the rejection of claims 1-8, 10-14, 16-17, 19-21, 33-40, 53-60, and 63 under 35 U.S.C. 102(b) be withdrawn.

The Second Anticipation Rejection

Claims 1-4, 6, 9, 11, 13-14, 20, 33-39, 41, and 53-60 (including all of the independent claims) are rejected under 35 U.S.C. § 102(b) over Kimura (U.S. Patent 6,760,510). To establish anticipation, each and every claim feature must be disclosed in a single cited art document.

Independent claims 1, 11, 13, 20, 33, 41 and 59, as amended, recite a first and second signal detector positioned to detect a first and second wavelength, respectively, or a first and second signal detector placed at a first and second output end, respectively (where the first and second wavelengths are directed to the respective output ends), and wherein the first and second wavelengths are comprised in a single

input source. Claims 1, 11, 13, 20, 33, 41 and 59 further recite a wavelength selective filter or mirror means that passes the first wavelength comprised in an input signal and reflects a second wavelength comprised in an input signal. Kimura appears to teach a detector (88) positioned to detect a wavelength λ_2 comprised in an input signal, wherein wavelength λ_2 is passed by a filter (86). However, Kimura does not teach a second detector positioned to detect a second wavelength comprised in an input signal wherein a wavelength selective filter or mirror means either passes or reflects the wavelength. A second detector (122) in addition to the detector (88) does appear to be present in Fig. 12 of Kimura; however, the detector (122) appears to monitor emissions for stability form a light source (73) located within the device and not a wavelength signal comprised in an input signal. (col. 14, ln. 34-40).

Fig. 10 of Kimura appears to show a second detector (102) that monitors a wavelength λ_1 comprised in an input signal. However, wavelength λ_1 is not passed or reflected by a wavelength selective filter nor a mirror means. Rather, wavelength λ_1 is separated for an input signal by a directional coupler (74). It is well known in the art that directional couplers are not wavelength selective filters nor do directional couples function through the use of a mirror means as commonly understood in the art nor as the term is used in the specification. Therefore, Kimura does not teach the two detectors for monitoring wavelengths reflected or passed by a wavelength selective filter or mirror means recited in claims 1, 11, 13, 20, 33, 41 and 59.

Independent claim 37, as amended, recites a second waveguide having a first end communicating with a wavelength selective filter and a second end communicating with a light signal source. Kimura appears to teach a light signal source (73) communicating with one end of a waveguide (74). However, the other of waveguide (74) communicates with a directional coupler (84) wherein light originating from the light signal source (73) exits the device and does not interact with wavelength selective filter nor a mirror means. Therefore, Kimura does not teach the light source recited by claim 37.

It is respectfully requested the rejection of claims 1-4, 6, 9, 11, 13-14, 20, 33-39, 41, and 53-60 under 35 U.S.C. 102(b) be withdrawn.

The Obviousness Rejections

Claim 15 has been rejected under 35 U.S.C. § 103(a) over Yamashita et al. in view of Kuhara et al (U.S. Patent Pub. 2003/0210866). Claim 18 has been rejected under 35 U.S.C. § 103(a) over Yamashita et al. et al in view of Fouquet (U.S. Patent 6,195,478). Claims 61 has been rejected under 35 U.S.C. § 103(a) over Yamashita et al. et al in view of Scobey (U.S. Patent 5,583,683). Claim 62 has been rejected under 35 U.S.C. § 103(a) over Yamashita et al. et al in view of Grasis et al (U.S. Patent 6,198,857). Claims 23-24 and 28 have been rejected under 35 U.S.C. § 103(a) over Yamashita et al. et al in view of Rolston et al (U.S. Patent Pub. 2005/0018993). Claims 23-24, and 28 have been rejected under 35 U.S.C. § 103(a) over Yamashita et al. et al in view of Rolston et al in further view of Di Domenico et al (U.S. Patent 4,165,496).

All of these rejections are traversed due to the inherent deficiencies of the primary cited art Yamashita et al. et al, discussed above. None of the secondary cited art

teaches or suggests a bi-directional transceiver device that separates optical bands of signals centered at a first and second wavelength comprised in the single input signal source. Accordingly, one skilled in the art would not have been motivated by the secondary art to make the devices of the claims. Withdrawal of the obviousness rejections is respectfully requested.

Petition for Extension of Time

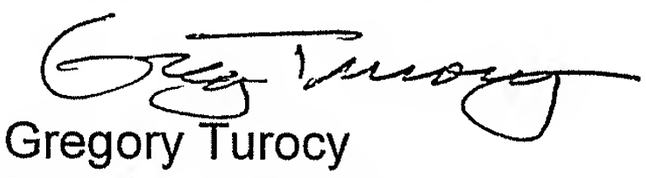
A request for a three month extension of time is hereby made. Payment is being made through the EFS electronic filing system.

Should the Examiner believe that a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

In the event any fees are due in connection with the filing of this document, the Commissioner is authorized to charge those fees for a small entity to our Deposit Account No. 50-1063.

Respectfully submitted,

AMIN, TUROCY & CALVIN, LLP



Gregory Turocy
Reg. No. 36,952

24th Floor
1900 East 9th Street
Cleveland, Ohio 44114
(216) 696-8730
Fax (216) 696-8731